

# **A SUCCESSFUL LIVE BIRTH FROM A VITRIFIED OOCYTE FOR FERTILITY PRESERVATION OF A PATIENT WITH BORDERLINE OVARIAN TUMOR UNDERGOING BILATERAL OVARIAN SURGERY**

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## **Abstract Body**

We hereby report the live birth of a healthy newborn using vitrified-warmed oocytes in a single young woman who underwent oocyte cryopreservation for fertility preservation before bilateral ovarian surgery when she was 26 years old. She underwent her first controlled ovarian stimulation (COS) before laparoscopic bilateral ovarian cystectomy due to borderline tumor and endometriosis. Through this cycle, a total of 10 mature (MII) oocytes were vitrified. Her pathology reports showed that she had a borderline tumor on the right side and endometrioma on the left. She got married after her first surgery. After eleven months of follow-up, she had a suspicious recurrence of a bilateral ovarian tumor. She subsequently underwent a second cycle of COS which yielded 13 MII oocytes. She had a total of 23 MII oocytes cryopreserved. No complications were noted during her two cycles of COS and oocyte retrieval process. She underwent laparoscopic right salpingo-oophorectomy and left ovarian cystectomy. After her surgery, she failed to conceive for 12 months. Three of the frozen oocytes which were cryopreserved for 2.5 years were thawed for intracytoplasmic sperm injection. All three were fertilized, and two grade-A cleavage stage embryos were transferred. A singleton pregnancy was achieved, resulting in the delivery of a healthy boy at 39.3 weeks of gestation. Oocyte cryopreservation is an effective method for fertility preservation before ovarian surgery when ovarian function decline is predictable.